# Federal Lands Highways Program

## Fiscal Year 2004 Base Program Overview

President George W. Bush is committed to addressing the National Park Service's (NPS) deferred maintenance backlog, which includes both facility and road requirements. In addition, with four of six congressionally mandated parkways completed, the NPS seeks to continue work on the final two, located in the Southeast region, and; to meet future challenges, the NPS is continuing to pursue alternative transportation systems. These focus areas are pursued in conjunction with meeting the NPS objectives of fostering environmental stewardship, promoting energy conservation, reducing noise and air pollution, enhancing access, supporting tourism and increasing public enjoyment and conservation awareness.

The NPS owns and operates approximately 5,456 paved miles of public park roads, some 3,000 miles of unpaved roads and 1,804 structures (bridges, culverts and tunnels). In addition, there are 108 alternative transportation systems in 96 park units utilizing trolleys, rail systems, canal boats, ferries, tour boats, cable cars, snow coaches, trams, buses and vans. Intelligent Transportation Systems are also in use, including traveler information systems, traffic management systems and entrance gate fast-pass systems. Of the 108 systems, 37 are operated by the local public transit agencies, making public access via bus or shuttle more attractive and convenient for visitors and park employees. Twelve parks own and operate their own systems; 59 systems are operated by concessions. The NPS transportation systems serve recreational travel and tourism, protect and enhance natural resources, and provide sustained economic development in gateway communities surrounding parks.

Public Law 105 -178, the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) authorized <u>Park Roads and Parkways Program (PRPP) funding levels at \$165 million annually through 2003.</u> These Highway Trust Funds dollars address critically needed transportation needs in three categories:

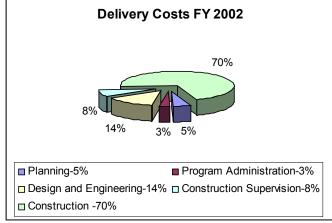
- 1. <u>Category I:</u> \$100-120 million annually to prevent further deterioration of the existing park roads and parkways infrastructure.
- 2. <u>Category II</u>: \$10-30 million annually to support completing the gaps on congressionally authorized parkways.
- 3. <u>Category III</u>: \$ 5-15 million annually to foster the Alternative Transportation Systems Program (ATSP).

Funding levels for these categories were adjusted annually to accommodate project scheduling, balance program priorities and address legislative adjustments such as a reduction of some \$20 million annually due to Section 1102(f), Title 23, United States Code.

# **FY 2002 Program Performance Accomplishments**

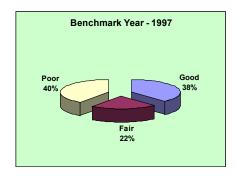
The NPS tracks program performance for roads, bridges and alternative transportation systems. Some accomplishments for FY 2002 include:

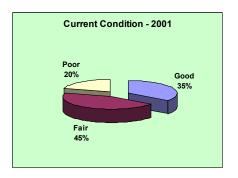
Program performance measures are tracked and goals are identified to guide expenditure of PRPP funds. Performance measures include five key construction program categories (planning, engineering design, construction, construction supervision and administrative costs). We have reviewed industry standards for these categories to develop funding ceilings that help to effectively and efficiently manage limited funds. The chart to the right reflects the preliminary FY 2002 PRPP delivery costs which meet our established program ceilings.



All dollar amounts in thousands

• For over a decade, the funding level for the PRPP was insufficient to keep the NPS road system from deteriorating. TEA-21 increased the PRPP funding level for the rehabilitation of roads and bridges based on a Federal Highway Administration (FHWA) analysis that indexed a proposed funding level commensurate with the condition of roads and bridges. The TEA-21 target is to provide enough funding to stabilize the condition of the system. Today's condition data, collected by the FHWA, indicates we are meeting these targets and successfully stabilizing the system condition. The graphs below illustrate that, based on FHWA data, the percentage of roads in poor condition decreased significantly between 1997 and 2001 while the percentage of roads in good condition remained stable.





The NPS and FHWA are continuously reviewing performance goals and measures to effectively and efficiently manage the program. For example, NPS has established a FY 2002 Facility Condition Index (FCI) baseline to help better describe pavement and bridge conditions and track performance in the coming fiscal years. The FCI is a measure of the estimated deferred maintenance costs, or deficiencies, for the road system compared to the current replacement value of the road assets in the system. By establishing this baseline, NPS will be able to measure the results that can be obtained from recommended funding levels. In the interim, NPS uses the industry standard, Pavement Condition Rating (PCR) to assess road condition. The FY 2002 baseline FCI:

|         | Replacement Cost | Deferred Maintenance | <u>FCI*</u> | PCR* | Structurally<br>Deficient<br>Bridges* |
|---------|------------------|----------------------|-------------|------|---------------------------------------|
| Roads   | \$8,450,100.00   | \$3,250,104.61       | 0.38        | 76   |                                       |
| Bridges | \$1,694,135.36   | \$155,972.02         | 0.09        |      | 3%                                    |

\*PCR (Pavement Condition Rating) is an industry standard for road conditions with 85-100=Good; 60-85=Fair; 0-60=Poor. FCIs (Facility Condition Indexes) for good, fair and poor roads and bridges have not been developed by engineers, scientists and facility managers. Facility Condition Index's for roads and bridges are unavailable for previous years, making this the benchmark year. Structurally Deficient Bridges are those bridges that are either closed, posted with weight restrictions, or monitored closely to ensure the safety of the traveling public.

#### **Alternative Transportation**

The legislatively mandated study, under section 3039 of TEA-21, called "Study of Alternative Transportation Needs in National Parks and Related Public Lands", completed by the United States Department of Transportation (USDOT), identifies and supports the need for continuation of an Alternative Transportation System Program (ATSB). Many popular National Park sites are experiencing very high visitation levels that are continuing to increase. For some gateway communities, clogged roads, insufficient parking, and other problems of site access are now constraining the number of visitors or the

All dollar amounts in thousands

length of time they stay in the community. In some instances, transit can expand the number of visitors to the site and increase the revenue spent by visitors in the surrounding communities.

Impacts to resources and the visitor's experience can be reduced through use of alternative transportation systems. Transit helps reduce parking demands, which are often inadequate and whose expansion often conflicts with resource preservation needs. Decreasing the total number of vehicles accessing the sites also reduces air pollution. New transit technologies operate much more quietly than older vehicles, thereby limiting noise pollution and reducing energy demands.

### **Highway Trust Fund Reauthorization**

With the reauthorization of the Highway Trust Fund expected to occur, the USDOT FHWA, in cooperation with the NPS and other fellow Federal agencies, has completed field focus meetings to gather input from users on how well the program has been meeting the National, regional and local needs. In addition, the NPS has solicited opportunities for program improvements from our internal and external customers. Transportation asset management inventory and assessment data has been analyzed and optimized for life cycle cost to develop funding needs and options.

In FY 2003, the NPS will continue to monitor the condition of pavement and bridges and will use Facility Condition Indexing (FCI), Pavement Condition Rating (PCR) and the percent of Structurally Deficient Bridges to evaluate its performance. It will also maintain or improve the condition of pavement and bridges while following industry standards for planning and administrative costs.

### Proposed FY 2004 Performance Based on a \$300 million PRPP:

In January 2003, the NPS and the FHWA signed a Memorandum of Agreement to cooperatively develop and implement an initiative to achieve the President's goal of eliminating the deferred maintenance backlog of NPS roads and bridges. This agreement will facilitate better coordination, emphasize the use of performance-based contracting, and streamline the compliance and planning process in order to complete projects more efficiently.

With this enhanced cooperation, the NPS and FHWA are committed to restore park roads to achieve system-wide condition of "good" by the end of the next highway reauthorization act in FY 2009. An industry standard called Pavement Condition Rating (PCR) will be used to measure the average condition for the park roads system. The NPS will also translate this measurement into the Facility Condition Index (FCI) so that it can incorporate park roads into calculations of overall park facility condition.

Based on a PRPP funding level of \$300 million in FY 2004, \$310 million in FY 2005, and \$320 million in each year from FY 2006 through FY 2009, the target performance goals are as follows for each PRPP category:

Category I: \$270-300 million annually to increase the percentage of existing road pavement and bridges from "poor" and "fair" to "good" condition (i.e., a Pavement Condition Rating of 85 and elimination of structurally deficient bridges). The 2009 target Facility Condition Index for pavement would be .20 from the current .38. This FCI goal is extrapolated from comparable Pavement Condition Ratings; actual FCI condition indexes for good, fair, and poor conditions are still being developed. The bridge Facility Condition Index would be less than .09.

Category II: \$3-10 million annually to support completing the gaps on Congressionally authorized parkways, such as the Foothills Parkway.

Category III: \$10-20 million annually to plan transportation systems and integrate visitor access and mobility using a combination of transportation technologies, facilities, and system management strategies.